

## NMEA2000® Relay Output Module 8 Way



- 8 Fully Isolated SPCO Relays
- 8 Amp @ 35 Volts DC or
- 16 Amp @ 250 Volt AC contacts
- Indicator LED for each relay
- Switch settable Device Instance
- Boat Builder Preferred WAGO Cage Clamp Terminal Connections
- Receives standard NMEA2000® Switch Bank / Relay Commands
- Transmits standard NMEA2000® Switch Bank / Relay Status every 2 seconds
- Certified to NMEA2000®

The Offshore Systems 3478 Relay Output Module - 8 Way allows messages over the NMEA2000® network to directly control 8 power relays using standard NMEA2000® PGN messages.

Each of these relays are each totally isolated and can be connected to any mix of DC or AC control circuits each controlling up to 8 Amps at 35 Volts DC or 250 Volts AC resistive load.

Normal applications for these relays would be providing remote alarm inputs, pump management, power switching contactors, light control and many other applications where power needs to be controlled over the network.

Each 3478 has a switch settable Switch Bank Instance to allow multiple Relay Output Modules on a single network.

The connections to the relays are made via boat builder preferred WAGO Cage Clamp terminal blocks which allow either solid or multistranded wires from 0.08 to 2.5mm<sup>2</sup> to be connected quickly and securely. Each relay output also has a tell tale green LED to indicate when each relay is operated.

The 3478 is operated from the standard NMEA2000® Switch Bank Control PGN 127502 from any NMEA2000® controller. The unit also transmits the standard NMEA2000® Switch Bank Status PGN 127501 every 2 seconds to keep the network updated.

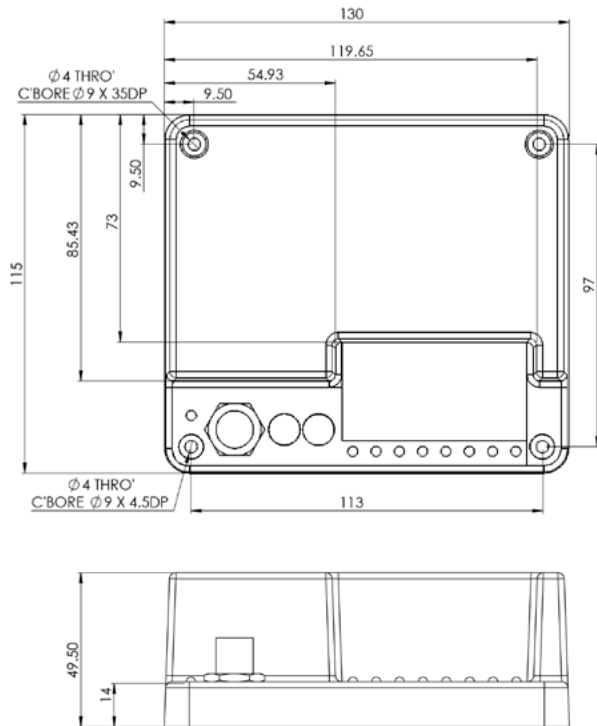
The unit comes with a detailed User Manual and is certified to the NMEA2000® network standard.



# NMEA2000® Relay Output Module 8 Way

## Part No. 3478

### Dimensions



| Outputs                                 |  |                       |
|---|--|-----------------------|
| Relay Outputs                           | 8 Fully Isolated SPCO Contacts                   |                       |
| DC Power Rating                         | 8 Amps at 35 Volts DC resistive load             |                       |
| AC Power Rating                         | 16 Amps at 250 Volts AC resistive load           |                       |
| Wire Sizes                              | Solid or Multistranded 0.08 - 2.5mm <sup>2</sup> |                       |
| Certification                           |  |                       |
| NMEA2000                                | Level B  |                       |
| Maritime Nav & RadioComm                | IEC60945   |                       |
| CE & FCC                                | Electromagnetic Compatibility                    |                       |
| NMEA2000 Parameter Group Numbers (PGNs) |  |                       |
| Type                                    | PGN No.  | PGN Name              |
| Command                                 | PGN127502  | Switch Bank Control   |
| Monitor                                 | PGN127501  | Switch Bank Status    |
| Protocol                                | PGN126464  | Tx/Rx PGN List        |
|   | PGN126996  | Product Information   |
|   | PGN059392  | ISO Acknowledge       |
|   | PGN059904  | ISO Request           |
|   | PGN060928  | ISO Address Claim     |
|   | PGN126208  | Command/Request Group |
| Electrical and Mechanical               |  |                       |
| Operating Voltage                       | 9 to 32 Volts                                    |                       |
| Power Consumption                       | 30-340mA   |                       |
| Load Equivalence Number                 | 7  |                       |
| Reverse Battery Protection              | Indefinitely                                     |                       |
| Load Dump Protection                    | Yes to SAE J1113                                 |                       |
| Size                                    | 143 x 113 x 53mm                                 |                       |
| Weight                                  |  |                       |
| Mechanical                              |  |                       |
| Environmental                           | Protected  |                       |
| Degree of protection                    | IP40   |                       |
| Operating Temperature                   | -25C to 50C                                      |                       |
| Storage Temperature                     | -40C to 70C                                      |                       |
| Relative Humidity                       | 93%RH @ 40C per IEC 60945-8.2                    |                       |
| Electromagnetic Emission                | Conduct/Radiated per IEC 60945-9                 |                       |
| Electromagnetic Immunity                | Conducted/Radiated per IEC 60945-10              |                       |

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